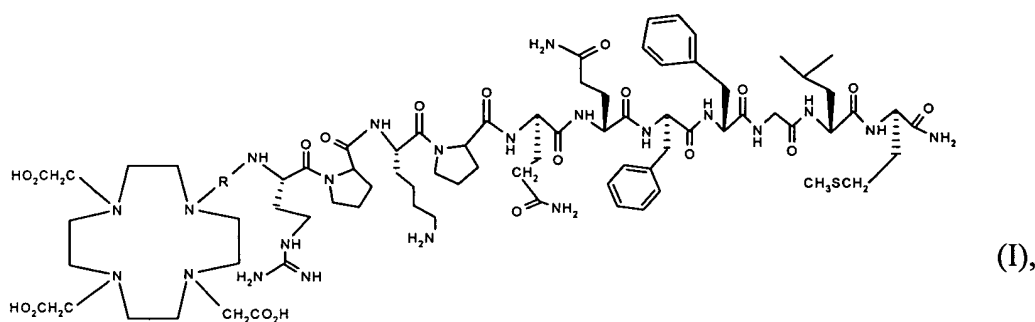


AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph on page 3, line 13, to page 5, line 7 with the following rewritten paragraph:

A first object of the invention is the use of radio-nuclide labelled conjugates of substance P and a chelator molecule, having the abbreviation

Chelator-R-Arg¹-Pro²-Lys³-Pro⁴-Gln⁵-Gln⁶-Phe⁷-Phe⁸-Gly⁹-Leu¹⁰-Met¹¹-NH₂ and comprising compounds of formula I

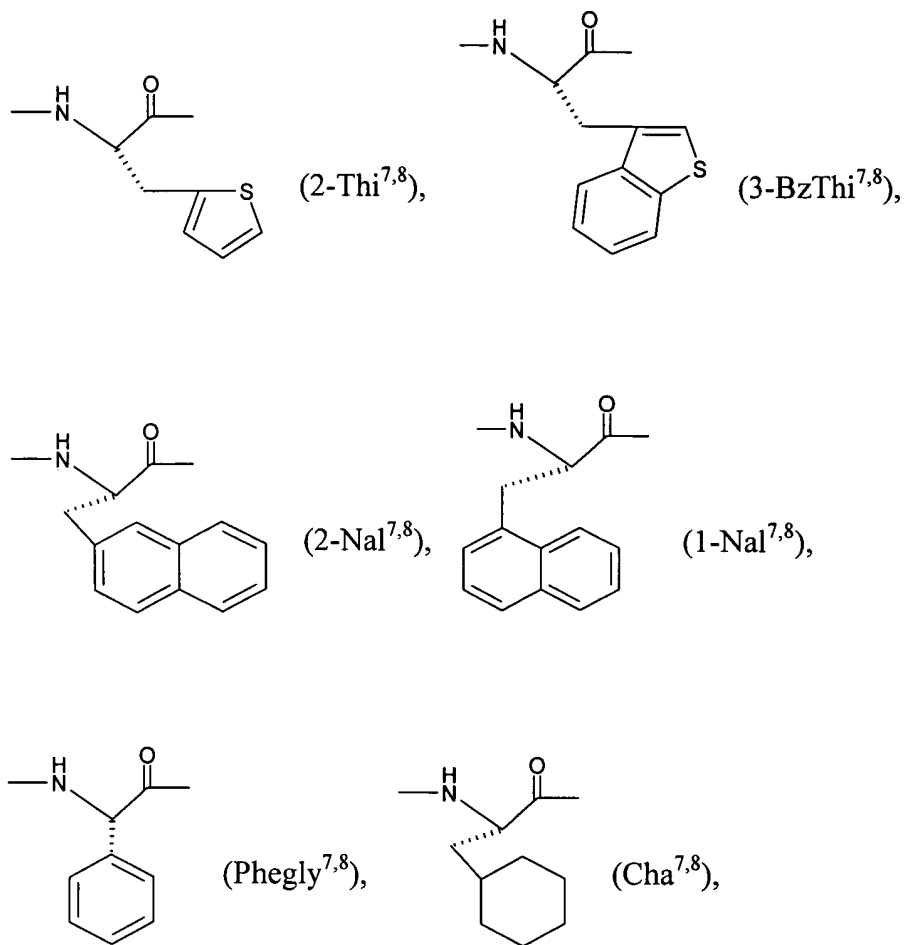


wherein

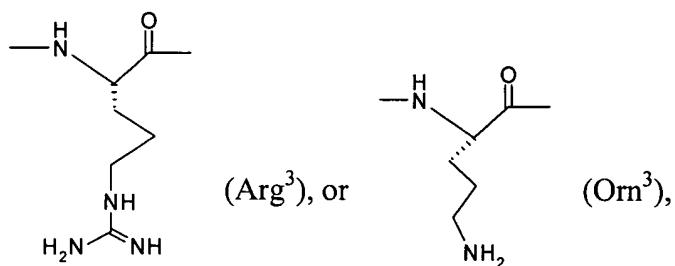
R is -CH₂-C(O)-, -CH(CO₂H)CH₂CH₂-C(O)- or CH(CO₂H)CH₂-C(O)-,

or an analogue of formula I with at least one of the subsequent modifications in the amino acid sequence of substance P:

- a) replacement of Met¹¹ by -NH-CH(CH₂CH₂-SO₂-CH₃)-C(O)- (hereinafter abbreviated Met(O₂)¹¹), -NH-CH(CH₂CH₂-SO-CH₃)-C(O)- (hereinafter abbreviated Met(O)¹¹), or -NH-CH[CH(CH₃)CH₂CH₃]-C(O)- (hereinafter abbreviated Ile¹¹),
- b) replacement of Leu¹⁰ by -NH-CH[CH(CH₃)CH₂CH₃]-C(O)- (hereinafter abbreviated Ile¹⁰),
- c) replacement of Gly⁹ by -N(CH₃)-CH₂-C(O)- (hereinafter abbreviated Sar⁹),
- d) replacement of Phe⁷ or Phe⁸ or both Phe⁷ and Phe⁸ by residue of formulae



e) replacement of Lys³ by residue of formulae



f) truncation of 1 to 5 amino acids of the sequence Arg¹-Pro²-Lys³-Pro⁴-Gln⁵, or

g) replacement of 1 to 5 amino acids of the sequence Arg¹-Pro²-Lys³-Pro⁴-Gln⁵ by -N(CH₃)-CH₂-C(O)- (hereinafter abbreviated Sar),

and wherein the conjugate is labelled with a radio-nuclide selected from the group consisting of Actinium-225, Bismut-212, Bismut-213, Lead-203, Copper-64, Copper-67,

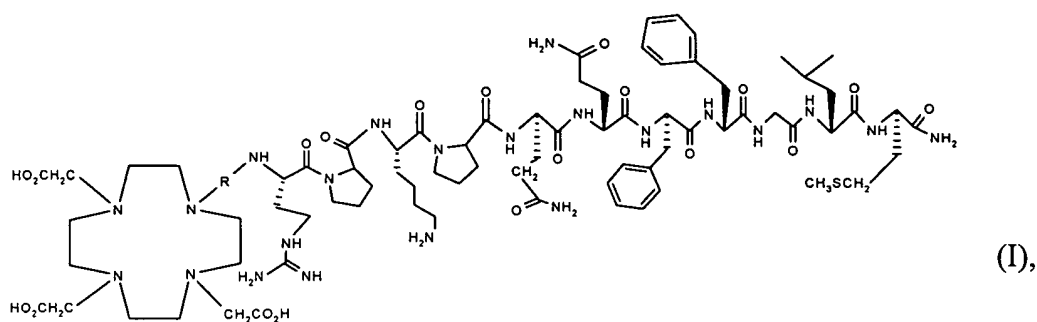
Gallium-66, Gallium-67, Gallium-68, Lutetium-177, Indium-111, Indium-113, Yttrium-86 and Yttrium-90, Dysprosium-162, Dysprosium-165, Dysprosium-167, Holmium-166, Praseodymium-142, Praseodymium-143, Promethium-149, and Terbium-149, as active ingredient in radio-pharmaceutical or radio-diagnostic formulations for targeting or treating brain tumors, especially gliomas.

Please replace the paragraph on page 5, lines 9-15 with the following rewritten paragraph:

When R in formula I attached to the tetraazamacrocyclic residue is $-\text{CH}_2-\text{C}(\text{O})-$, it is abbreviated as chelator DOTA; when R in formula I attached to the tetraazamacrocyclic residue is $-\text{CH}(\text{CO}_2\text{H})\text{CH}_2\text{CH}_2-\text{C}(\text{O})-$, it is abbreviated as chelator DOTAGA; and when R in formula I attached to the tetraazacyclic residue is $-\text{CH}(\text{CO}_2\text{H})\text{CH}_2-\text{C}(\text{O})-$, it is abbreviated as chelator DOTASA. When the carboxylic groups in the chelator moieties are esterified, for example with t-butanol, then the residues are named prochelator. The prochelators can be used for convenient coupling to peptides during solid phase synthesis.

Please replace the paragraph on page 9, line 5 to page 11, line 6 with the following rewritten paragraph:

A further object of the invention are conjugates of substance P or substance P analogues and a chelator molecule, whereby substance P conjugate has the abbreviation Chelator-R-Arg¹-Pro²-Lys³-Pro⁴-Gln⁵-Gln⁶-Phe⁷-Phe⁸-Gly⁹-Leu¹⁰-Met¹¹-NH₂ and comprises compounds of formula I



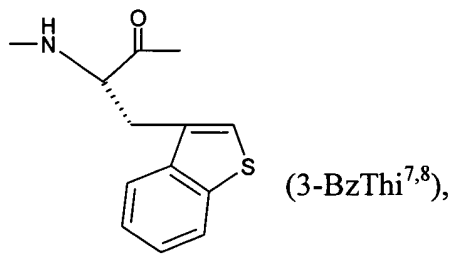
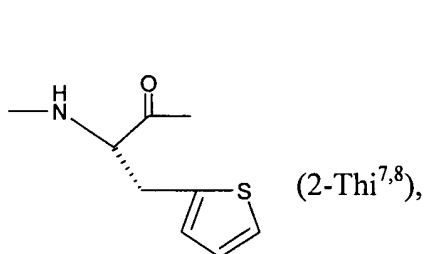
wherein

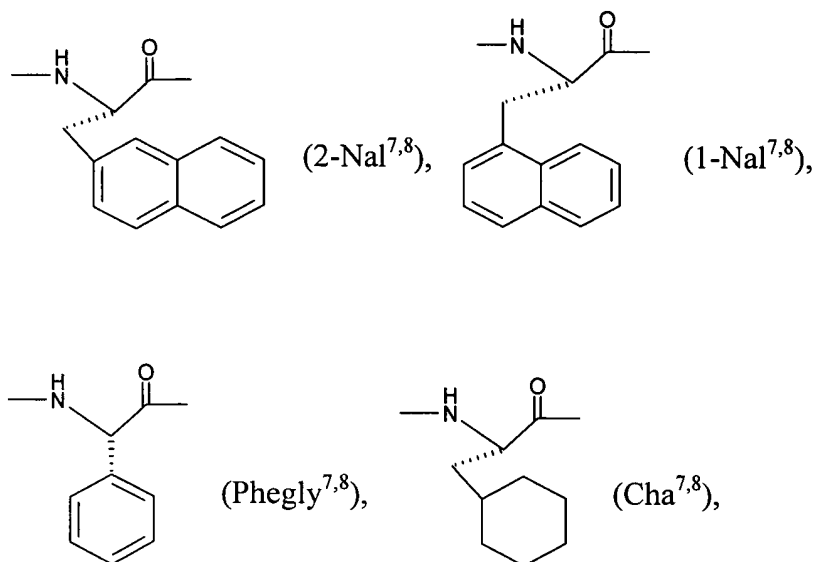
R is $-\text{CH}_2-\text{C}(\text{O})-$, $-\text{CH}(\text{CO}_2\text{H})\text{CH}_2\text{CH}_2-\text{C}(\text{O})-$ or $-\text{CH}(\text{CO}_2\text{H})\text{CH}_2-\text{C}(\text{O})-$, with the proviso that R is

$-\text{CH}_2-\text{C}(\text{O})-$, when the conjugate comprises the substance P sequence,

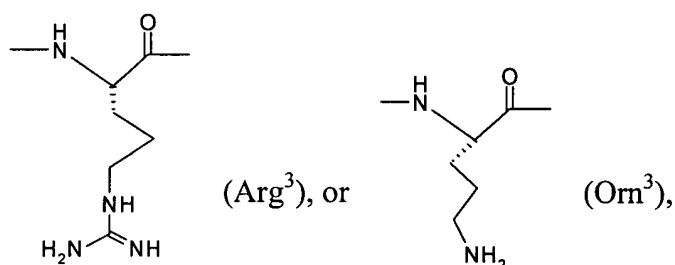
and an analogue of formula I with at least one of the subsequent modifications in the amino acid sequence of substance P:

- a) replacement of Met¹¹ by $-\text{NH}-\text{CH}(\text{CH}_2\text{CH}_2-\text{SO}_2-\text{CH}_3)-\text{C}(\text{O})-$ (hereinafter abbreviated Met(O₂)¹¹), $-\text{NH}-\text{CH}(\text{CH}_2\text{CH}_2-\text{SO}-\text{CH}_3)-\text{C}(\text{O})-$ (hereinafter abbreviated Met(O)¹¹), or $-\text{NH}-\text{CH}[\text{CH}(\text{CH}_3)\text{CH}_2\text{CH}_3]-\text{C}(\text{O})-$ (hereinafter abbreviated Ile¹¹),
- b) replacement of Leu¹⁰ by $-\text{NH}-\text{CH}[\text{CH}(\text{CH}_3)\text{CH}_2\text{CH}_3]-\text{C}(\text{O})-$ (hereinafter abbreviated Ile¹⁰),
- c) replacement of Gly⁹ by $-\text{N}(\text{CH}_3)-\text{CH}_2-\text{C}(\text{O})-$ (hereinafter abbreviated Sar⁹),
- d) replacement of Phe⁷ or Phe⁸ or both Phe⁷ and Phe⁸ by residue of formulae





e) replacement of Lys³ by residue of formulae



f) truncation of 1 to 5 amino acids of the sequence Arg¹-Pro²-Lys³-Pro⁴-Gln⁵, or

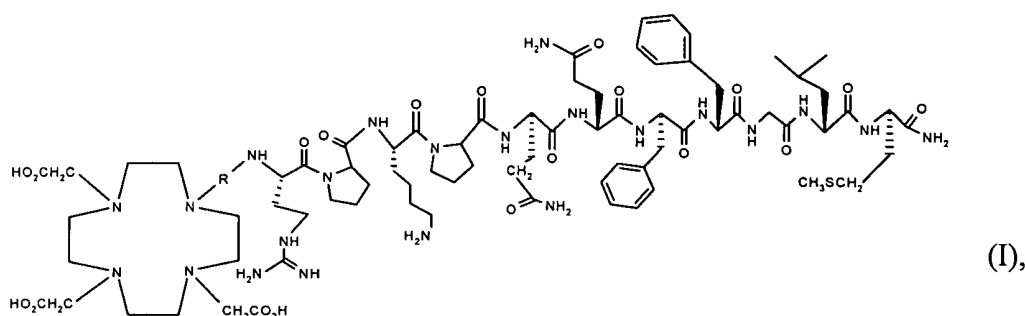
g) replacement of 1 to 5 amino acids of the sequence Arg¹-Pro²-Lys³-Pro⁴-Gln⁵ by -N(CH₃)-CH₂-C(O)- (hereinafter abbreviated Sar),

and wherein the conjugates are unlabelled or labelled with a radionuclide selected from the group consisting of Actinium-225, Bismut-212, Bismut-213, Lead-203, Copper-64, Copper-67, Gallium-66, Gallium-67, Gallium-68, Lutetium-177, Indium-111, Indium-113, Yttrium-86 and Yttrium-90, Dysprosium-162, Dysprosium-165, Dysprosium-167, Holmium-166, Praseodymium-142, Praseodymium-143, Promethium-149, and Terbium-149;

including preferred embodiments of the analogues as mentioned before.

Please replace the paragraph on page 11, line 8 to page 13, line 4 with the following rewritten paragraph:

Still a further object of the invention is a composition comprising (a) at least one pharmaceutical carrier and (b) at least one conjugate of a substance P or an analogue of substance P and a chelator molecule, whereby substance P conjugate has the abbreviation Chelator-R-Arg¹-Pro²-Lys³-Pro⁴-Gln⁵-Gln⁶-Phe⁷-Phe⁸-Gly⁹-Leu¹⁰-Met¹¹-NH₂ and comprises compounds of formula I



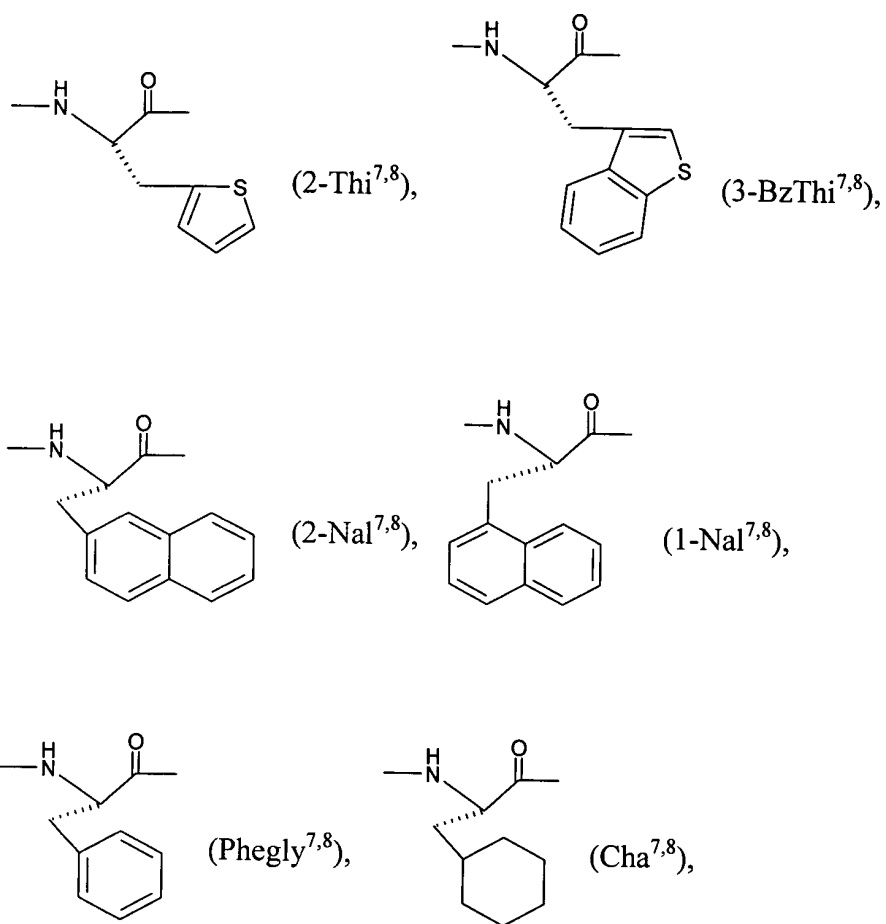
wherein

R is -CH₂-C(O)-, -CH(CO₂H)CH₂CH₂-C(O)- or -CH(CO₂H)CH₂-C(O)-, with the proviso that R is

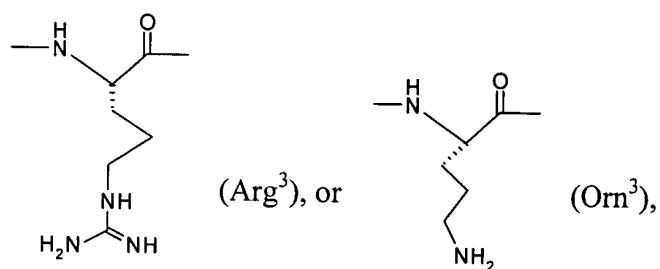
-CH₂-C(O)-, when the conjugate comprises the substance P sequence,

and an analogue of formula I with at least one of the subsequent modifications in the amino acid sequence of substance P:

- a) replacement of Met¹¹ by -NH-CH(CH₂CH₂-SO₂-CH₃)-C(O)- (hereinafter abbreviated Met(O₂)¹¹), -NH-CH(CH₂CH₂-SO-CH₃)-C(O)- (hereinafter abbreviated Met(O)¹¹), or -NH-CH[CH(CH₃)CH₂CH₃]-C(O)- (hereinafter abbreviated Ile¹¹),
- b) replacement of Leu¹⁰ by -NH-CH[CH(CH₃)CH₂CH₃]-C(O)- (hereinafter abbreviated Ile¹⁰),
- c) replacement of Gly⁹ by -N(CH₃)-CH₂-C(O)- (hereinafter abbreviated Sar⁹),
- d) replacement of Phe⁷ or Phe⁸ or both Phe⁷ and Phe⁸ by residue of formulae



e) replacement of Lys³ by residue of formulae



f) truncation of 1 to 5 amino acids of the sequence Arg¹-Pro²-Lys³-Pro⁴-Gln⁵, or
 g) replacement of 1 to 5 amino acids of the sequence Arg¹-Pro²-Lys³-Pro⁴-Gln⁵ by
 -N(CH₃)-CH₂-C(O)- (hereinafter abbreviated Sar),

and wherein the conjugates are labelled with a radionuclide selected from the group consisting of Actinium-225, Bismut-212, Bismut-213, Lead-203, Copper-64, Copper-67, Gallium-66, Gallium-67, Gallium-68, Lutetium-177, Indium-111, Indium-113, Yttrium-86 and Yttrium-90, Dyprosium-162, Dysprosium-165, Dysprosium-167, Holmium-166, Praseodymium-142, Praseodymium-143, Promethium-149, and Terbium-149; including preferred embodiments of the analogues as mentioned before.